

ABSTRACT

Provided are artificial muscle patches, which are adapted to be implanted adjacent a patient's heart, and artificial sphincter cuffs, which are adapted to be implanted around a body lumen, such as the urethra, the anal canal, or the lower esophagus. The devices of the present invention comprise: (a) one or more electroactive polymer actuators; and (b) a control unit for electrically controlling the one or more electroactive polymer actuators to expand or contract the devices.